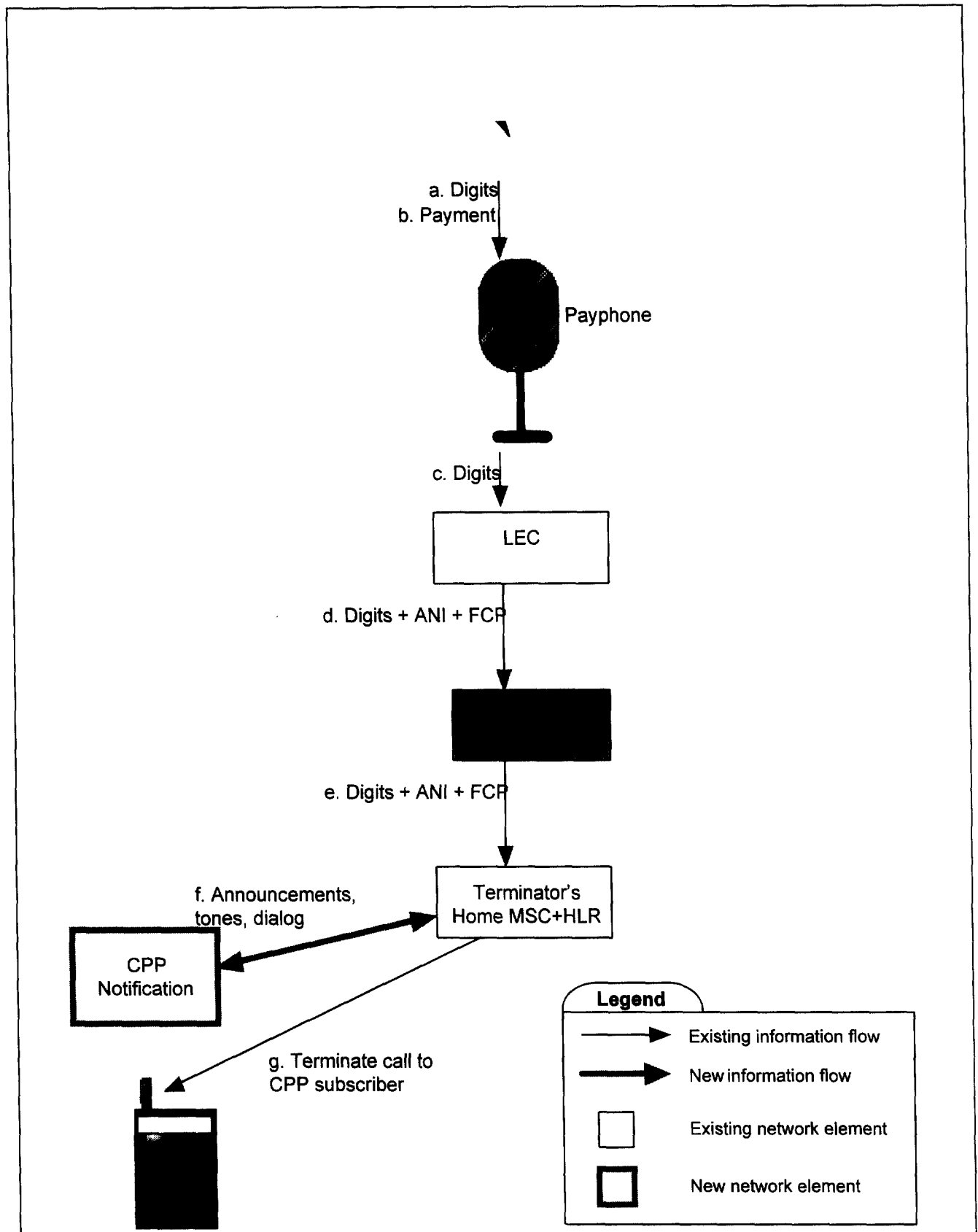


3.4 Call from Payphone

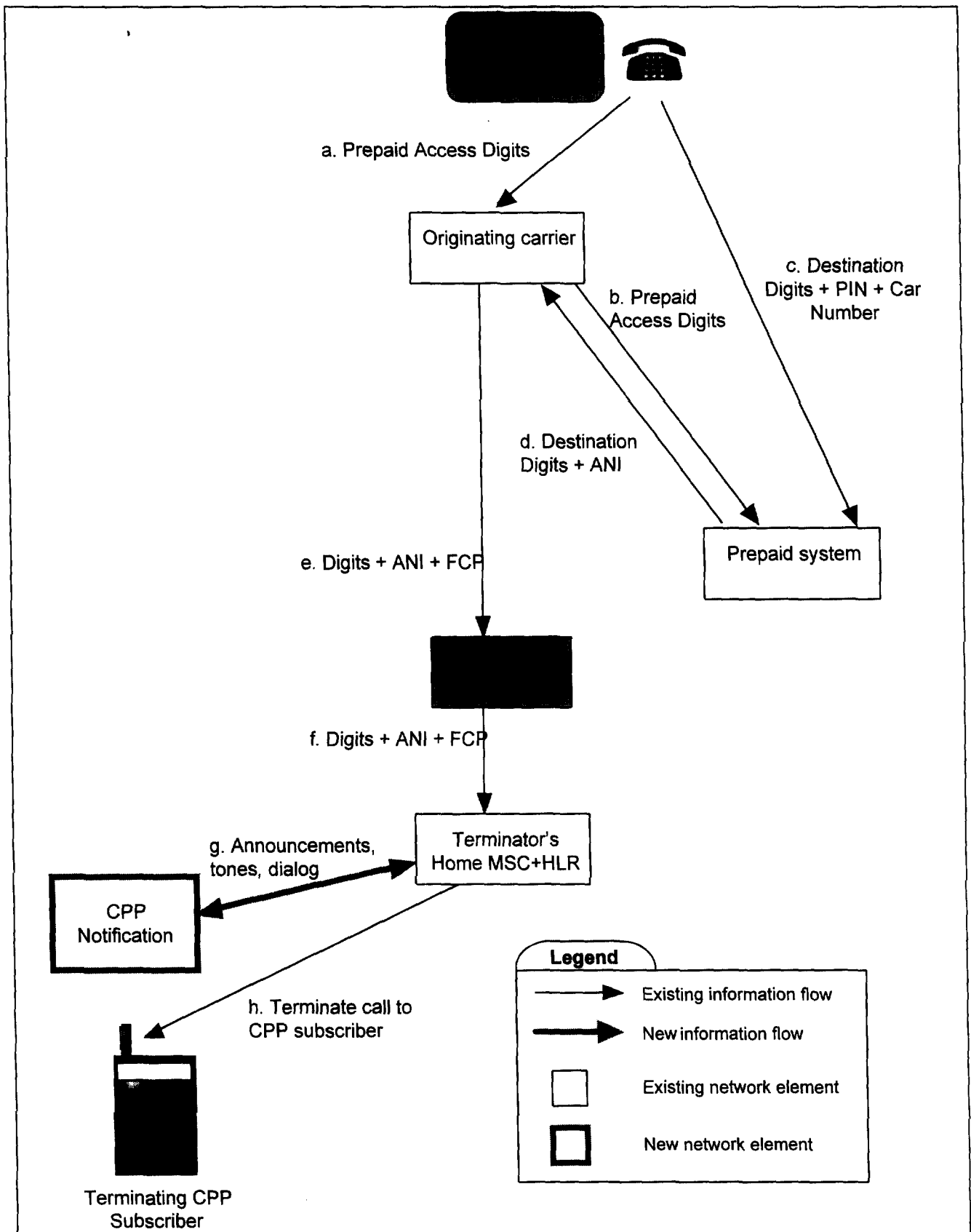


This scenario considers calls from a payphone. Since the payphone cannot determine that the terminating number is a CPP subscriber (at least not in the presence of number portability), it is necessary to provide alternate billing or block the call.

- a. The phone number of a wireless CPP subscriber is "dialed" from a payphone.
- b. The caller makes payment for the call, based on a rate defined by the payphone or its controller. Note that the CPP charges are not included in this payment.
- c. The local exchange routes the call based on dialed digits, a possible number portability query, and other information. Note that the call has not been recognized as CPP at this point. The dialed digits, ANI and FCP are forwarded to the next switch, which may be an inter-exchange carrier.
- d. If an inter-exchange carrier is involved in the call, it will need to pass the received parameters on unchanged.
- e. Because of information in the FCP, the wireless system notifies the caller that the call cannot proceed without alternate billing arrangements (e.g. a credit card). If appropriate billing information is not provided, the call is blocked. Automatic billing is not possible because the wireless carrier has no way to influence the coin collection algorithm of either the payphone or payphone controller.
- f. If the caller provides appropriate billing information, the call can be terminated to the CPP subscriber. It is assumed that, if the CPP subscriber is roaming, the terminating party implicitly accepts all incremental roaming charges (including roaming airtime and daily roaming charges).

Note that, because alternate billing arrangements were made, the call detail record will not result in the creation of a billing record, and thus is not shown on this scenario.

3.5 Call from Prepaid Device



This scenario considers calls from a prepaid device, such as a prepaid calling card.

- a. A prepaid system is accessed by dialing an access number (e.g. 1-800 number) from any telephone device.
- b. The originating carrier routes the call based on the dialed access digits to the prepaid system.
- c. Once the call is connected to the prepaid system, additional information may need to be gathered directly from the user (e.g. a card number, PIN and the actual destination number, probably using DTMF tones).
- d. The prepaid system routes the call, possibly back to the originating carrier, or another similar carrier.
- e. The local exchange routes the call based on the dialed destination digits, a possible number portability query, and other information. Note that the call has not been recognized as CPP at this point. The dialed digits, ANI and FCP are forwarded to the next switch, which may be an inter-exchange carrier.
- f. If an inter-exchange carrier is involved in the call, it will need to pass the received parameters on unchanged.
- g. Because of information in the FCP, the wireless system notifies the caller that the call cannot proceed without alternate billing arrangements (e.g. a credit card). If appropriate billing information is not provided, the call is blocked. Automatic billing is not possible because the wireless system has no way to influence the prepaid systems debit algorithm (which subtracts units at regular intervals based on the calculated per-minute cost of the call).
- h. If the caller provides appropriate billing information, the call can be terminated to the CPP subscriber. Note that it is assumed that, if the CPP subscriber is roaming, the terminating party implicitly accepts all incremental roaming charges (including roaming airtime and daily roaming charges).

Note that, because alternate billing arrangements were made, the call detail record will not result in the creation of a billing record, and thus is not shown on this scenario.

4.0 Standardization

tbd

4.1 TIA Standardization

tbd

4.2 ATIS Standardization

tbd

4.3 CIBERNET Advisory Committee

tbd

4.4 Coordination with Other Bodies

tbd

5.0 Phase II Implementation

Several items are not recommended for implementation in the first phase of CPP implementation. They are described here to provide guidance for future developments.

5.1 Prepaid Wireless

Prepaid wireless makes it more difficult to bill for CPP calls from other wireless phones. This can be handled in one of the following ways.

- i. The home wireless carrier does not allow calls from prepaid mobiles. This assumes that prepaid mobiles are identified to the terminating carrier during call setup.
- ii. The home wireless carrier reverts to called-party-pays for calls from prepaid mobiles. This also assumes that prepaid mobiles are identified to the terminating carrier during call setup.
- iii. The home wireless carrier bills the prepaid carrier which 'absorbs' the CPP charges in the prepaid per-minute rate. This is the situation that will occur without special handling for prepaid.
- iv. The home wireless carrier informs the prepaid carrier, during call setup (possibly via ISUP signaling), of the per-minute CPP rate, and the prepaid carrier adjusts its debit increments appropriately.

5.2 Prepaid Wireline

Prepaid systems based on wireline system also create difficulties billing for CPP calls. These systems can be based on an intermediate prepaid switch, or can be integrated with local or inter-exchange carrier switches. Users can be provided with a special card, or the service could be associated with their home line (e.g. in cases of bad credit). This can be handled in one of the following ways.

- i. The home wireless carrier does not allow calls from prepaid wireline systems. This assumes that prepaid systems are identified to the terminating carrier during call setup.
- ii. The home wireless carrier reverts to called-party-pays for calls from prepaid wireline systems. This also assumes that prepaid systems are identified to the terminating carrier during call setup.
- iii. The home wireless carrier bills the prepaid carrier which 'absorbs' the CPP charges in the prepaid per-minute rate. This is the situation that will occur without special handling for prepaid.
- iv. The home wireless carrier informs the prepaid carrier, during call setup (possibly via ISUP signaling), of the per-minute CPP rate, and the prepaid carrier adjusts its debit increments appropriately.

5.3 Hotel/Motel/etc. Billing

Treatment of calls from hotel/motel (and other phones with similar end-user billing arrangements) can be;

- i. Denied.
- ii. Paid by the originating system (i.e. built into the cost of calling - probably not acceptable for flat rate local calls).
- iii. Paid by the caller (requiring a new flow of billing information from wireless carriers to local carriers to hotel/motel PBX systems).

5.4 Payphones

Treatment of calls from payphones can be;

- i. Denied.
- ii. Paid by the payphone operator (i.e. built into the cost of calling - probably not acceptable for flat rate local calls).
- iii. Paid by the caller (requiring a new flow of charge-rate information from wireless carriers to payphones, which may be physically impossible with existing payphones).

5.5 LEC Alternate Billing

There are situations where the LEC can provide alternate billing more efficiently than the home wireless carrier. Such situations include LEC-controlled payphones, hotel/motel/etc. phones or prepaid systems with which the LEC has special arrangements. If this was supported, the following modifications would have to be made:

- i. The LEC would have to indicate its ability to perform this function in the Forward CPP Parameters (possibly using a special value of CPPBI).
- ii. The home wireless carrier would have to accept this offer, possibly through a new or modified parameter in the response to the ISUP IAM setup message. This would transfer billing responsibility back to the LEC.
- iii. This new parameter would have to include the per-minute charge rate of the CPP call.
- iv. The LEC would have to arrange to charge the caller the appropriate rate throughout the call.
- v. The wireless carrier would send a settlement record to the LEC, possibly long after the call had terminated, to collect its portion of the CPP revenue from the LEC.

6.0 Expectations on Originating Entities

tbd